



NASA Procedural Requirements

NPR 8580.1Effective Date: November 26, 2001
Expiration Date: November 26, 2008**COMPLIANCE IS MANDATORY**[Printable Format \(PDF\)](#)

Subject: Implementing The National Environmental Policy Act And Executive Order 12114**Responsible Office: Environmental Management Division**

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APPENDIX I. Record Of Environmental Consideration And Environmental Evaluation Checklist Examples

Appendix I provides examples of record of considerations REC's and environmental evaluation checklists. With issuance of this NPR, any reference made to NHB 8800.11 is superseded.

I-1 Record of Environmental Consideration Examples**RECORD OF ENVIRONMENTAL CONSIDERATION**

1. Description and location of proposed action:
2. Anticipated date and/or duration of proposed action:
3. It has been determined that the above action (choose one):
 - a. Is adequately covered in an existing EA, EIS, entitled and dated.
 - b. Qualifies for Categorical Exclusion # 7, paragraph 305 (d) NHB 8800.11 (Table 2.3) NASA NEPA Guidelines, and has no special circumstances which would suggest a need for an Environmental Assessment.
 - c. Is exempt from NEPA requirements under the provisions of (cite superseding law):
 - d. Has no environmental impact as indicated by the results of an Environmental Analysis Checklist and/or a detailed Environmental Analysis. (Attach Checklist and/or Environmental Analysis as applicable.)
 - e. Will require the preparation of an Environmental Assessment.
4. Actions to be coordinated with Code DQH:
[Lists actions, e.g.: Air permits, if required; Use and disposal of CFCs; Asbestos abatement; Lead paint abatement; Hazardous materials use and storage; PCB handling and disposal; Storm water permits; Confined space entry; Sampling and disposal of contaminated soil and/or groundwater; Chemical use and storm water runoff for sprinkler use; Radiography; Compliance with Migratory Bird Treaty Act; Compliance with NASA's standard for lifting devices and equipment]
5. Actions to be coordinated with Code JFF:
[List of actions, e.g.: Section 106 Historic Review]

(Environmental Program Manager, DQH)

Date:

[cc's to Project Managers and EMO staff]

RECORD OF ENVIRONMENTAL CONSIDERATION**THIS SECTION TO BE FILLED OUT BY PROJECT MANAGER**

1. Description Of Proposed Project And Alternatives (DOPAA).

2. Purpose and need for action.
3. Anticipated date and/or duration of proposed action.
4. Cost of proposed action.

Project total =

SIGNED: _____ Org. Code _____
Project Manager

NEPA

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

PROJECT:

THE FOLLOWING WILL BE COMPLETED BY THE OEP

5. It has been determined that the above action:
 - a. Is adequately covered in an existing EAEIS entitled and dated .
 - b. Qualifies for categorical exclusion # , 14 CFR 1216.305, and has no special circumstances which would suggest a need for an environmental assessment.
 - c. Is exempt from NEPA requirements under the provisions of.
 - d. Has no environmental impact as indicated by the results of an Environmental Analysis Checklist and/or a detailed Environmental Analysis. (Attach Checklist or Environmental Analysis as applicable).
 - e. Will require an Environmental Assessment.
 - f. Will require an Environmental Impact Statement.
 - g. Will include mitigation, as described:

SIGNED:

DATE:

(Chief, Office of Environmental Programs)

This project has been assigned to _____, at extension, as the contact person within the Office of Environmental Programs.

NE0001 ENVIRONMENTAL RECORD OF CONSIDERATION PROJECT:

Purpose:

Evaluation:

Special Considerations:

Determination: This action is categorically exempt from further environmental assessment based on the information provided in the project description. If there are changes to the siting or other aspects of the project then this document is invalidated and the action will be reassessed.

Project Officer

CONCUR
NONCONCUR

DATE:

Environmental Coordinator	CONCUR NONCONCUR	DATE:
I-2 Environmental Evaluation Checklist Examples NEPA Environmental Checklist (R&D Projects)		
Project Name:		Date of Selection:
Project Contact:		Project Start Date:
Building Number and Location:		Telephone Number:
Description of Project:		

Environmental Impacts:

"Yes" responses may require the project to prepare an Environmental Assessment or conduct additional studies.

A.	Geologic:	Yes	Maybe	No
<input type="checkbox"/>	a. Greater than 10 % change in topography or ground surface relief features?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Any increase in wind or water erosion of soils, either on or off site?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Changes in deposition, siltation, or erosion that may modify the wetlands or bay?...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Explain all "yes" and "maybe" answers: _____				
B.	Air:	Yes	Maybe	No
<input type="checkbox"/>	a. Substantial air emissions or deterioration of ambient air quality?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. The creation of objectionable odors?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Alteration of air movement, moisture, temperature, or any changes in climate, either locally or regionally?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Explain all "yes" and "maybe" answers: _____				
C.	Water:	Yes	Maybe	No
<input type="checkbox"/>	a. Disturbance of groundwater?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Greater than 10% changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Alter the course or flow of flood waters?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d. Alteration of the direction or rate of ground waters?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	e. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	f. Activities resulting in changes of greater than 10 percent of Center total potable water use (more than 35,100,000 gallons/year)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	g. Any construction or other activity in a floodplain or wetland?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Explain all "yes" and "maybe" answers: _____				
D.	Cultural Resources:	Yes	Maybe	No
<input type="checkbox"/>	a. Is the project located in an historic district or effects an existing landmark?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Will the project alter a building that is 50 years or older?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Is the project located in an area of suspected archaeological resources?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	
E. Biological Resources:		Yes Maybe No
<input type="checkbox"/>	a. Construction/grading/filling within or adjacent to designated wetlands?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	b. Reduction of the numbers of any rare, or endangered species?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	c. Construction/grading/filling within open space or grasslands areas?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	d. Introduction of new species or plants into an area, or impacts the normal replenishment of existing species?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	e. Proposed construction activities in burrowing owl habitat?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	f. Propose new landscaping or modify existing landscaping?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	
F. Noise:		Yes Maybe No
<input type="checkbox"/>	a. A noise increase greater than 10% from an existing operation?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	b. Exposure of people to severe noise levels (above 80 dBA)?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	c. Increase existing CNEL noise contours surrounding the airfield or Ames?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	
G. Land Use:		Yes Maybe No
<input type="checkbox"/>	a. Substantial alteration of the present or planned land use?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	b. Increase in the rate of use of any natural resource?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	c. Activities resulting in changes of greater than 10 percent of Center energy consumption (15,000,000 kWh of office electricity, 15,000,000 kWh wind tunnel electricity, or 382,000 therms of natural gas)?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	d. Activities resulting in a change in total employment levels greater than 10 percent (More than 620 people)?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	
H. Health and Safety:		Yes Maybe No
<input type="checkbox"/>	a. Generation of ionizing or nonionizing radiation?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	b. Generate any air emissions?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	c. Use of pesticides, including insecticides, herbicides, fungicides or rodenticides?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	d. Confined space entry?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	e. Risk of exposure to asbestos or lead containing materials?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	f. Result in the exposure or disturbance of contaminated soil or ground water?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	g. Generate industrial waste water or storm water discharge?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

<input type="checkbox"/>	h.	Use of Class I ozone depleting substances (CFCs, TCA, halons)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	i.	Acquisition, use, or storage of any toxic or hazardous substance?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	j.	Generation of medical (biohazard), hazardous, toxic, or radiological wastes?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	k.	Use, disturbance or disposal of PCBs?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	l.	Use of toxic gas?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	
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I.	Transportation/Circulation:	Yes	Maybe	No
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<input type="checkbox"/>	a.	Generation of substantial vehicle trips (over 620 per day)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b.	Affect existing parking facilities or demand for new parking?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c.	Substantial impact upon existing transportation systems?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d.	Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	
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J.	Services:	Yes	Maybe	No
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<input type="checkbox"/>	a.	Affect or result in need for new or altered government-provided fire protection services?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b.	Affect or result in need for new or altered government-provided security services?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	
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K.	Environmental Justice:	Yes	Maybe	No
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<input type="checkbox"/>	a.	Does the project have the potential to disproportionately affect low income populations or minority populations?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	
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NEPA Environmental Checklist (Facilities Projects)

Project Name:		Current Date:	
Project Contact:		Project Start Date:	
Building Number and Location:	Telephone Number:		
Description of Project:			

Environmental Impacts:

"Yes" responses may require the project to prepare an Environmental Assessment or conduct additional studies.

A.	Geologic:	Yes	Maybe	No
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<input type="checkbox"/>	a.	Greater than 10 % change in topography or ground surface relief features?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b.	Any increase in wind or water erosion of soils, either on or off site?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c.	Changes in deposition, siltation, or erosion that may modify the wetlands or bay?...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<input type="checkbox"/>	Explain all "yes" and "maybe" answers:			
B. Air:		Yes	Maybe	No
<input type="checkbox"/>	a. Substantial air emissions or deterioration of ambient air quality?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. The creation of objectionable odors?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Alteration of air movement, moisture, temperature, or any changes in climate, either locally or regionally?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:			
C. Water:		Yes	Maybe	No
<input type="checkbox"/>	a. Disturbance of groundwater?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Greater than 10% changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Alter the course or flow of flood waters?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d. Alteration of the direction or rate of ground waters?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	e. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	f. Activities resulting in changes of greater than 10 percent of Center total potable water use (more than 35,100,000 gallons/year)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	g. Any construction or other activity in a floodplain or wetland?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:			
D. Cultural Resources:		Yes	Maybe	No
<input type="checkbox"/>	a. Is the project located in an historic district or effects an existing landmark?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Will the project alter a building that is 50 years or older?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Is the project located in an area of suspected archaeological resources?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:			
E. Biological Resources:		Yes	Maybe	No
<input type="checkbox"/>	a. Construction/grading/filling within or adjacent to designated wetlands?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Reduction of the numbers of any rare, or endangered species?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Construction/grading/filling within open space or grasslands areas?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d. Introduction of new species or plants into an area, or impacts the normal replenishment of existing species?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	e. Proposed construction activities in burrowing owl habitat?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	f. Propose new landscaping or modify existing landscaping?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:			

F. Noise:		Yes Maybe No			
	a.	A noise increase greater than 10% from an existing operation?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b.	Exposure of people to severe noise levels (above 80 dBA)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
face="Times New Roman,T , imes ">	c.	Increase existing CNEL noise contours surrounding the airfield or Ames?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Explain all "yes" and "maybe" answers: 					
G. Land Use:		Yes Maybe No			
	a.	Substantial alteration of the present or planned land use?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b.	Increase in the rate of use of any natural resource?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c.	Activities resulting in changes of greater than 10 percent of Center energy consumption (15,000,000 kWh of office electricity, 15,000,000 kWh wind tunnel electricity, or 382,000 therms of natural gas)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d.	Activities resulting in a change in total employment levels greater than 10 percent (More than 620 people)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Explain all "yes" and "maybe" answers: 					
H. Health and Safety:		Yes Maybe No			
	a.	Generation of ionizing or nonionizing radiation?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b.	Generate any air emissions?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c.	Use of pesticides, including insecticides, herbicides, fungicides or rodenticides?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d.	Confined space entry?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e.	Risk of exposure to asbestos or lead containing materials?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f.	Result in the exposure or disturbance of contaminated soil or ground water?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	g.	Generate industrial waste water or storm water discharge?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	h.	Use of Class I ozone depleting substances (CFCs, TCA, halons)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	i.	Acquisition, use, or storage of any toxic or hazardous substance?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	j.	Generation of medical (biohazard), hazardous, toxic, or radiological wastes?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	k.	Use, disturbance or disposal of PCBs?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	l.	Use of toxic gas?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Explain all "yes" and "maybe" answers: 					
I. Transportation/Circulation:		Yes Maybe No			
	a.	Generation of substantial vehicle trips (over 620 per day)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b.	Affect existing parking facilities or demand for new parking?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c.	Substantial impact upon existing transportation systems?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d.	Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	
J. Services:		Yes Maybe No
<input type="checkbox"/>	a. Affect or result in need for new or altered government-provided fire protection services?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	b. Affect or result in need for new or altered government-provided security services?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	
K. Environmental Justice:		Yes Maybe No
<input type="checkbox"/>	a. Does the project have the potential to disproportionately affect low income populations or minority populations?.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:	

**JET PROPULSION LABORATORY
ENVIRONMENTAL COMPLIANCE ANALYSIS**
(for EAO use only)

ID NUMBER:
(for EAO use only)

TYPE OF PROPOSED ACTION:

- FINAL STATUS:
- No further assessment required
 - Conditionally exempt
 - Environmental Impact Study Required

Instructions Indicate the effect on each appropriate attribute listed below. Additional attribute may be listed in the other sections.

"+" = positive effect
 "o" = no effect
 "-" = adverse effect
 "u" = effect unknown

EARTH	+	o	-	u
Erosion (wind/water)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface stability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agricultural lands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WATER	+	o	-	u
Aquatic life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flow variation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer yield	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aesthetic properties and potential use of water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural streams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chemical quality (wastewater, stormwater, run-off) (pH, DS, heavy metals, organics, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical quality (wastewater, stormwater, run-off) (ss, oil, temp)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Odors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toxic substances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Particulates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air movement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Permitting				
Other (SO _x , NO _x , CO, hydrocarbons, photochemical oxidants)				
BIOTICS	+	o	-	u
Undisturbed natural areas				
Game animals and fish				
Threatened and endangered species				
Species balance				
RESOURCES	+	o	-	u
Fuel resource, consumption/conservation				
Water consumption/conservation				
Energy consumption/conservation				
RADIATION	+	o	-	u
Ionizing radiation				
Electromagnetic				
Ultraviolet				
Lasers				
ACTIVITY/SYSTEMS	+	o	-	u
Transportation/supply/demand				
Sewer sanitary				
Wastewater permitting (EPA categorical)				
Storm drainage (NPDES permitting)				
LAND USE	+	o	-	u
Flood plain/wetlands				
Off-Lab land use				
On-Lab land use				
History/archeological areas				
Aesthetics				
Access to Minerals				
SOCIO-ECONOMICS	+	o	-	u
Population				
Housing supply/demand				
Employment				
Commercial activities				
Industrial activities				
Cultural patterns				
Historic landmarks				
NOISE	+	o	-	u
On-Lab levels				
Off-Lab levels				
OTHER	+	o	-	u
Health & Safety				
Potential Wild Fire Hazard				

REMARKS:

Name of EAO Environmental Engineer _____

Signature _____ Date _____

Refer to: 95-038.FRC (rev 1/96)

NEPA Environmental Checklist

Project Name:		Current Date:	
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Project Contact:		Project Start Date:	
Building Number and Location:	Telephone Number:		
Description of Project:			

Environmental Impacts:

"Yes" responses may require the project to prepare an Environmental Assessment or conduct additional studies.

A. Geologic:	Yes	Maybe	No
<input type="checkbox"/> a.	Greater than 10 % change in topography or ground surface relief features?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> b.	Any increase in wind or water erosion of soils, either on or off site?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> c.	Changes in deposition, siltation, or erosion that may modify the wetlands or bay?...	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:		
<hr/>			
B. Air:	Yes	Maybe	No
<input type="checkbox"/> a.	Substantial air emissions or deterioration of ambient air quality?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> b.	The creation of objectionable odors?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> c.	Alteration of air movement, moisture, temperature, or any changes in climate, either locally or regionally?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:		
<hr/>			
C. Water:	Yes	Maybe	No
<input type="checkbox"/> a.	Disturbance of groundwater?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> b.	Greater than 10% changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> c.	Alter the course or flow of flood waters?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> d.	Alteration of the direction or rate of ground waters?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> e.	Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> f.	Activities resulting in changes of greater than 10 percent of Center total potable water use (more than 35,100,000 gallons/year)?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> g.	Any construction or other activity in a floodplain or wetland?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:		
<hr/>			
D. Cultural Resources:	Yes	Maybe	No
<input type="checkbox"/> a.	Is the project located in an historic district or effects an existing landmark?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> b.	Will the project alter a building that is 50 years or older?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> c.	Is the project located in an area of suspected archaeological resources?.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Explain all "yes" and "maybe" answers:		
<hr/>			
E. Biological Resources:	Yes	Maybe	No

<input type="checkbox"/>	a.	Construction/grading/filling within or adjacent to designated wetlands?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b.	Reduction of the numbers of any rare, or endangered species?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c.	Construction/grading/filling within open space or grasslands areas?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d.	Introduction of new species or plants into an area, or impacts the normal replenishment of existing species?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	e.	Proposed construction activities in burrowing owl habitat?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	f.	Propose new landscaping or modify existing landscaping?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Explain all "yes" and "maybe" answers:

F. Noise: ☐ **Yes** ☐ **Maybe** ☐ **No**

<input type="checkbox"/>	a.	A noise increase greater than 10% from an existing operation?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b.	Exposure of people to severe noise levels (above 80 dBA)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c.	Increase existing CNEL noise contours surrounding the airfield or Ames?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Explain all "yes" and "maybe" answers:

G. Land Use: ☐ **Yes** ☐ **Maybe** ☐ **No**

<input type="checkbox"/>	a.	Substantial alteration of the present or planned land use?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b.	Increase in the rate of use of any natural resource?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c.	Activities resulting in changes of greater than 10 percent of Center energy consumption (15,000,000 kWh of office electricity, 15,000,000 kWh wind tunnel electricity, or 382,000 therms of natural gas)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d.	Activities resulting in a change in total employment levels greater than 10 percent (More than 620 people)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Explain all "yes" and "maybe" answers:

H. Health and Safety: ☐ **Yes** ☐ **Maybe** ☐ **No**

<input type="checkbox"/>	a.	Generation of ionizing or nonionizing radiation?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b.	Generate any air emissions?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c.	Use of pesticides, including insecticides, herbicides, fungicides or rodenticides?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d.	Confined space entry?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	e.	Risk of exposure to asbestos or lead containing materials?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	f.	Result in the exposure or disturbance of contaminated soil or ground water?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	g.	Generate industrial waste water or storm water discharge?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	h.	Use of Class I ozone depleting substances (CFCs, TCA, halons)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	i.	Acquisition, use, or storage of any toxic or hazardous substance?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<input type="checkbox"/>	j.	Generation of medical (biohazard), hazardous, toxic, or radiological wastes?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	k.	Use, disturbance or disposal of PCBs?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Explain all "yes" and "maybe" answers: _____					
<hr/>					
I. Transportation/Circulation:			Yes	Maybe	No
<input type="checkbox"/>	a.	Generation of substantial vehicle trips (over 620 per day)?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b.	Affect existing parking facilities or demand for new parking?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c.	Substantial impact upon existing transportation systems?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d.	Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Explain all "yes" and "maybe" answers: _____					
<hr/>					
J. Services:			Yes	Maybe	No
<input type="checkbox"/>	a.	Affect or result in need for new or altered government-provided fire protection services?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b.	Affect or result in need for new or altered government-provided security services?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Explain all "yes" and "maybe" answers: _____					
<hr/>					
K. Environmental Justice:			Yes	Maybe	No
<input type="checkbox"/>	a.	Does the project have the potential to disproportionately affect low income populations or minority populations?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Explain all "yes" and "maybe" answers: _____					
<hr/>					

**Engineering Design - Environmental Checklist for 8/93
New Projects, Maintenance, Repair or Renovation Activities**

Project: _____

Project Location: _____

Project Description: _____

Point of Contact: _____

Phone: _____

Date: _____

Code: _____

Mailstop: _____

For any new construction, modification, renovation, repair, equipment change-out, and/or maintenance activity, please complete the following checklist to determine if a negative environmental impact exists. If any response is a yes or maybe, please contact the Safety, Health & Environmental Quality Office (ext. 2306) for assistance.

1.	Will the construction, installation, activation, change-out, or operation of the proposed project require the use of any chemicals?	YES	NO	MAYBE
----	---	-----	----	-------

2.	Will the construction, installation, activation, change-out, or operation of the proposed project require the use of any hazardous materials?	YES	NO	MAYBE
----	---	-----	----	-------

2. Will any chemical or substance (other than clean air) be vented or discharged into the atmosphere, soil, stormwater system, sewer system or groundwater resources? YES NO MAYBE
3. Will the project involve installation, alteration, modification or maintenance of any of the following: (circle all that apply)
- | | | |
|------------------|----------------------|----------------------|
| a. fume hoods | b. industrial ovens | c. steam generators |
| d. boilers | e. exhaust fans | f. HVAC systems |
| g. scrubbers | h. vents | i. drains |
| j. piping | k. compressors | l. cooling towers |
| m. chillers | n. paint booths | o. diesel generators |
| p. AGE equipment | q. abrasive blasters | r. spray booths |
| s. plasma booths | t. incinerators | u. battery rooms |
| v. degreasers | w. chemical baths | x. other (specify) |
4. Will the project require an environmental permit? (circle all that apply) YES NO MAYBE
- a. Kern County (Desert) Air Pollution Control Permit
- b. Lahontan - Regional Water Quality Control Board Order
- c. National Pollution Discharge Elimination System (NPDES) Permit
- d. Department of Toxic Substances - TSD Permit or RCRA Manifest
5. Will this project involve surface preparation, paint removal or sandblasting of a facility or a large piece of equipment? YES NO MAYBE
6. Will the project produce new or increase the volume of industrial sanitary wastewater? YES NO MAYBE
7. Will the project produce new or increase the volume of stormwater runoff? Consider parking lots, aircraft aprons and paved surfaces. YES NO MAYBE
8. Will the project involve the construction of a new facility or new utilities? YES NO MAYBE
9. Will the project involve installation, alteration, renovation, modification or maintenance of any of the following: (circle all that apply)
- | | | |
|---------------------|-----------------|-----------------------|
| a. dikes | b. impoundments | c. drainage ditches |
| d. septic tanks | e. sewer lines | f. sewer connections |
| g. culverts | h. water lines | i. above ground tanks |
| j. wells | k. ponds | l. underground tanks |
| m. comm lines | n. sumps | o. french drains |
| p. electrical lines | q. separators | r. storm drains |
| s. seepage pits | t. channels | u. other (specify) |

10.	Will the project require the use of groundwater supplies?	YES	NO	MAYBE
11.	Will the project require removal of vegetation, land clearing, land grading, filling, or excavation?	YES	NO	MAYBE
12.	Will there be any construction or other activities in a floodplain or wetland area?	YES	NO	MAYBE
13.	Will the project require use or generation of any radiation (ionizing or non-ionizing) source?	YES	NO	MAYBE
14.	Will the project require acquisition, use, generation, storage, or disposal of any hazardous or toxic materials or chemicals?	YES	NO	MAYBE
15.	Will the project generate high noise levels (above 80 dBA)?	YES	NO	MAYBE
16.	Will the project affect areas within or around significant historical or archaeological sites?	YES	NO	MAYBE
17.	Will the project affect sensitive wildlife habitat ?	YES	NO	MAYBE
18.	Will there be any action which could or will affect any threatened or endangered species?	YES	NO	MAYBE
19.	Will the project require use of pesticides, including insecticides, herbicides, fungicides and rodenticides?	YES	NO	MAYBE
20.	Will the project requires removal of asbestos or PCB materials?	YES	NO	MAYBE
21.	Will the project generate hazardous, toxic or radiological waste?	YES	NO	MAYBE
22.	Is the project located on or near a Superfund Site?	YES	NO	MAYBE
23.	Will the project require installation or modification of fire protection or fire detection systems?	YES	NO	MAYBE
24.	Will the project have other issues which may pose an environmental impact?	YES	NO	MAYBE
25.	Will the project require submission of an Air Force Form 813 ?	YES	NO	MAYBE
26.	Does this project violate the Base Comprehensive Plan?	YES	NO	MAYBE
27.	Comments/Additional Information.	YES	NO	MAYBE

Kennedy Space Center Environmental Checklist instructions and form can be found at

<http://www-jj.ksc.nasa.gov/jj-a/programs/nepa/checklist/checklist.htm> or as seen below.

KSC ENVIRONMENTAL CHECKLIST INSTRUCTIONS

SECTION 1

This section is to provide pertinent project information when the Checklist is to be retained in your files or submitted to the NASA Environmental Coordinator and forwarded to the JJ-D Natural Resources Program Office for review.

SECTION 2a

This section is to assist you in completing necessary actions that require basic environmental actions including reporting to regulatory agencies or NASA compliance. Please review each item carefully and follow these instructions completely. If you have any doubts about a particular item, please mark "YES" on the checklist, and complete the identified actions listed in these instructions. A "YES" mark in this section DOES NOT require the checklist to be submitted to the Environmental Program Office (EPO). You are responsible for completing the required actions and retaining this documentation.

a. Asbestos is a regulated material that can no longer be used in construction materials. If this project will disrupt (in any way) construction materials, an asbestos survey should be completed if one has not been done already. Contact EG&G Environmental Health at 867-2400 for a Support request. EG&G Environmental Health has completed a KSC-wide asbestos survey and the data is compiled on the KSC Environmental Health Asbestos Survey Data Home Page (www-boc1.asbestos/asb_home.htm). If you know that asbestos exists and will be disturbed, regulations from 62-257 F.A.C. must be followed. If less than 260 linear feet, or less than 160 square feet of regulated asbestos containing material (RACM) is to be removed, there are no fee or reporting requirements. If the removal trips these thresholds, or is greater than 1 cubic meter (if the project cannot be measured in linear or square feet), regulations require a notification (completed by EG&G) to FDEP. The Air Group within JJ-D Environmental Program Office must be copied on all reports submitted to FDEP.

b. If the project requires the installation, modification, removal or refurbishment of polychlorinated biphenyl (PCB) containing materials, proper labeling, storing, and disposal methods must be followed. For waste disposal, a process waste questionnaire (KSC Form 26-551 (3/82)) must be completed through the EG&G Waste Management Authority (867-8640). Please adhere to requirements identified in KHB's 8800.6 and 8800.7.

c. Use, storage, generation and/or disposal of hazardous, potentially hazardous, or toxic materials. For waste disposal, a process waste questionnaire (KSC Form 26-551 (3/82)) must be completed through the EG&G Waste Management Authority (867-8640).

d. If the project requires the installation, operation, maintenance, modification, upgrade, repair, closure, removal, including disposal of aboveground or underground storage tanks and associated systems that store regulated substances, the following actions are required:

Notification requirements: Verbal notification must be made to the NASA, EPO, JJ-D-1 (phone 867-4237), 14 days prior to the start of any work. NASA EPO will provide the required information regarding the work to be accomplished to Brevard County Tank and Natural Resources office.

General registration requirements: The Florida Administrative Code (FAC) 62-761.400 requires the owner (NASA) of any in-service or out-of-service or unmaintained storage tank system which has the capacity of greater than 110 gallons to register the storage tank system with the Department on Form 62-761.900(2). The form must be submitted to FDEP through the EPO, JJ-D-1, no later than 30 days after regulated substances are put into any new storage tank system. Any changes of status associated with storage tank systems will be identified, reported and submitted to the EPO, JJ-D-1 on Form 62-761.900.

e. If the project includes generation or use (excluding microwave ovens) of ionizing or nonionizing radiation, the equipment involved must be reviewed and approved by the KSC Radiation Protection Officer at 867-4237.

SECTION 2b

This section is to assist you in providing the detailed information necessary to provide a complete assessment of regulatory and nonregulatory environmental requirements associated with your project. Please review each item carefully and provide all information requested. All packages must include a project description, detailed location maps, and complete project drawings or sketches. If you have any doubts about a particular item, please mark "YES" on the checklist, provide as much information as you can, and it will be reviewed completely.

f. Air emissions can occur either directly (i.e., stacks, vents, fuel generators, etc.) or indirectly (i.e., painting, sandblasting). Include in the project description, details of the type of direct or indirect emission associated with this project. If chemicals are used that are included in the emission in any way, list them and the amounts to be used in the project description.

g. Ozone Depleting Chemicals (ODC) are now regulated under the Clean Air Act. A list of all ODC's can be found in regulation 40 CFR Part 82. In addition, Hazardous Air Pollutants (HAP's) must also be identified as an air emission. This list of 189 pollutants can be found in regulation 62-210.200 F.A.C. Please include any of these chemicals or pollutants in the project description.

h. The listed facilities are either listed or eligible historic properties as defined by regulation and all activities or "undertakings" on these properties must be reviewed to determine the effects on the property. The regulatory definition of an "Undertaking" (36 CFR Part 800.2) is "any project, activity, or program that can result in changes in the character or use of historic properties, if any such historic properties are located in the area of potential effects. The project, activity, or program must be under the direct or indirect jurisdiction of a Federal agency or licensed or assisted by a Federal agency. Undertakings include new and continuing projects, activities, or programs and any of their elements not previously considered under Section 106."

The following actions would require a "YES" being marked on the Checklist: Demolition of the facility, abandonment in-place, construction of an adjoining structure exterior to the building or structure, or transfer of the property to another entity. In addition, if maintenance is performed which will result in a change in the existing structural integrity, operational function, or visual integrity (including color) of the facility, a "YES" must be marked on the Checklist.

All maintenance activities which restore or maintain original functions and visual integrity are considered "routine maintenance" and can be answered by marking "NO" on the Checklist.

i. If installations or modifications to Industrial Wastewater (IWW) or Domestic Wastewater (DWW) system are expected, mark "YES" on the checklist and provide the following applicable project details:

- Complete description of the new system (unit, facility, lines, etc.) for the project's treatment plant/unit, collection/transmission line and/or liftstation. If applicable, include details of single service connection to existing sewer line or pretreatment facility or single gravity feed sewer line to existing collection system.
- Complete description of the modifications proposed, such as change in size, capacity, configuration or treatment for the project's treatment plant/unit, collection/transmission line and/or liftstation.
- Complete description of the septic tank/system, wastewater holding tank, or portalet/bathroom unit (excluding portalet/bathroom units used for construction sites).
- Complete description and/or map of location of project work (internal or external of facilities for DWW, include location and distance to nearest sewer connection, etc.).

j. If the project requires installation or modification to a potable water system, mark "YES" on the checklist and include the following detailed information:

- The diameter of the line to be installed (or modified).
- Type of meter to be installed or that no meter will be installed.
- Replacement of lines using the existing design (i.e., same size and/or location).
- Location of project, interior or exterior of facilities.
- Distance of pipeline for a fire hydrant relocation.

k. If the project calls for any kind of land disturbance, soil addition/removal, excavation, digging, grading, impervious area additions or natural vegetation trimming or removal (excluding landscaped areas), please mark "YES" on the Checklist and provide the following applicable information:

- Area of impervious surface to be added.
- Detailed location maps of project area.
- Size of entire project area if over 5 acres.
- Amount of soil to be added or removed from location identified on detailed map.
- Amount of natural vegetation to be removed or trimmed.
- Identify if land disturbance is within any ditch areas.

l. If construction dewatering is expected during the project, please mark "YES" on the Checklist and provide the following applicable information so it can be determined if a Consumptive Use Permit (CUP) is required:

- Estimated daily maximum pumping volume.
- Estimated average daily pumping volume, if project is of long duration. Also identify timeframe of dewatering activities.
- Identify upland locations surrounding project area, which are proposed to , be used for discharge.

m. If new or modifications to exterior lighting is necessary, please mark "YES" and submit design details with the Checklist. In general, Low Pressure Sodium Lights (LPS) should be used if at all possible. New lights should be mounted at no more than 25 feet above the working surface. Shields must be placed on all lights including LPS. If existing lights are to be modified or refurbished, the same actions apply. The KSC Exterior Lighting Guidelines are developed to assist project management in complying with these lighting requirements. For a copy of this document, call the JJ-D Natural Resources Program Office at 867-2213, or it can be accessed on the EPO Home Page (www-jj.ksc.nasa.gov/jj-d/epo_main.html).

n. If the project is located on CCAS or other locations outside of KSC boundaries, mark "YES" and submit this form with appropriate maps associated with the project.

o. If any other issues are identified during the project analysis that could affect the environment, this block should be marked "YES" and the issues should be discussed in detail in the project description attached to the Checklist.

SECTION 3

This section is necessary for compliance with the NEPA regulations of having a NASA entity responsible for all NEPA reviews. The Environmental Coordinator for the responsible NASA directorate must sign this section and submit the Checklist and all attached information to the EPO for review.

This Checklist is to be used as a worksheet for all projects and activities to help identify any associated environmental issues.

Section 1.

PROJECT TITLE _____

PROJECT LEAD _____ ORG/MAIL CODE _____

TELEPHONE NO. _____ PROJECT NO. _____

ESTIMATED START DATE _____ ESTIMATED COMPLETION DATE _____

Section 2a.

Will any phase of the proposed project, process or activity (construction, installation, removal, activation or operation) involve any of the following (see instructions for guidance; IF IN DOUBT, MARK YES). If any of these items are marked YES, it is considered Categorically Excluded, but NOT necessary to submit the Checklist form and project information to the Environmental Program Office (EPO). However, the actions identified in the attached instructions must be completed and the Checklist form completed and kept on file.

YES	NO	
<input type="checkbox"/>	<input type="checkbox"/>	a. Asbestos removal, abatement, or possible disruption of construction materials that may contain asbestos.
<input type="checkbox"/>	<input type="checkbox"/>	b. PCB-containing materials or equipment.
<input type="checkbox"/>	<input type="checkbox"/>	c. Use, storage, generation, and/or disposal of hazardous, potentially hazardous, or toxic materials.
<input type="checkbox"/>	<input type="checkbox"/>	d. Construction, modification or repair of aboveground or underground storage tanks.
<input type="checkbox"/>	<input type="checkbox"/>	e. Generation of ionizing or non-ionizing radiation or use of any radiation source (excluding microwave ovens).

Section 2b.

Will any phase of the proposed project, process or activity (construction, installation, removal, activation or operation) involve any of the following (see instructions for guidance; IF IN DOUBT, MARK YES). If any of these items are marked YES, you must complete the National Environmental Policy Act (NEPA) review by submitting the form and requested additional information to the appropriate NASA Environmental Coordinator. The signed Checklist must then be submitted to the (EPO):

YES	NO	
<input type="checkbox"/>	<input type="checkbox"/>	f. Discharge of any substance into the air either, directly (i.e., stack, vent, fuel powered generator, etc.) or indirectly (i.e., painting, sandblasting, etc.).
<input type="checkbox"/>	<input type="checkbox"/>	g. The use of Ozone Depleting Chemicals (ODC's) or Hazardous Air Pollutants (HAP's).
<input type="checkbox"/>	<input type="checkbox"/>	h. Any modification, other than routine maintenance, to any of the following: VAB, LCC, MLP's, Crawlerway, LC39A, LC39B, Press Site countdown clock/flagpole, CIF, HQ's, or O&C.
<input type="checkbox"/>	<input type="checkbox"/>	i. Generation of wastewaters or modification to system that handles or transports wastewaters.
<input type="checkbox"/>	<input type="checkbox"/>	j. Installation or modification of potable water systems.
<input type="checkbox"/>	<input type="checkbox"/>	k. Land disturbance, soil addition or removal, excavation, digging or grading, impervious area addition, or natural vegetation trimming or removal.
<input type="checkbox"/>	<input type="checkbox"/>	l. Construction dewatering.
<input type="checkbox"/>	<input type="checkbox"/>	m. Installation of new exterior lighting systems, or rehabilitation or modification of existing exterior lighting systems.
<input type="checkbox"/>	<input type="checkbox"/>	n. Is the project located on CCAS or other locations outside of KSC boundaries.
<input type="checkbox"/>	<input type="checkbox"/>	o. Other actions, which could produce environmental impacts.

If all are marked NO from Section 2b, this project is Categorically Excluded from further (NEPA) review. Submittal to Environmental Coordinator is not required.

Section 3. NASA ENVIRONMENTAL COORDINATOR CONCURRENCE:

I have reviewed the information contained herein, verified that it is accurate and complete and hereby submit it to the KSC Environmental Program Office for consideration.

Name: _____ Mail Code: _____ Phone: _____
Signature: _____ Date: _____

PRELIMINARY ENVIRONMENTAL SURVEY FOR MARSHALL SPACE FLIGHT CENTER

1. PROJECT DESCRIPTION

- a. Project Title
- b. Date of Survey
- c. Contact Person
- d. Construction Start
- e. Activation Start
- f. Description of Proposed Action or Existing Activity (Attach NASA Form 1509 or equivalent and process flow diagram)
- g. Location of Proposed Action/Existing Activity:
- h. Type of Facility (Modification or expansion of existing, new construction, existing)
- i. Estimated Land area required:
- j. Estimated number of employees:
Construction:
Permanent:
- k. Estimated cost of proposed activity:
_____ Fund Source
_____ Total cost
_____ Construction Payroll
_____ Annual Operation Payroll
- l. Estimated operating schedule:
Hours per day:
Days per week: Sat or Sun: Yes No
Weeks per year: Back Shift Hours:
- m. Anticipated Life of Project: Years

4. AIR (Does the activity:)

- a. Use fuel burning equipment? Yes No
 - (1) Boiler:
Natural Gas or Other
 - (2) Air Heating for Space:
Natural Gas
Propane
Other
 - (3) Generator:
Gasoline
Diesel
Gas (Lox/H₂)
Other
- b. Store and/or consume any solid material? (coal, ash, and/or process reagents or chemicals)
Specify type and amount?
- c. Store and/or use any gaseous, pressurized or liquid chemicals? (nitrogen, helium, hydrogen, oxygen, diesel fuel, gasoline, lubricating oil, waste oil, ethylene glycol, acids, caustics, chemical cleaners, solvents, paints, laboratory chemicals, photographic chemicals, oxidizers, pesticides/herbicides, hydraulic fluids, RP-1, hydrazine, carbon dioxide, acetylene, propane, butane, other)
Specify type and amount?
- d. Use CFC's, halons, methyl chloroform or carbon tetrachloride? (CFC-11, CFC-12, CFC-113, Halon 1211, Methyl chloroform)
Specify type and amount?
- e. Produce any particulate emissions?
Specify type, amount and control?
- f. Use any particulate emission control equipment? (Cyclone, water scrubber, venturi scrubber, electrostatic precipitator, baghouse, other)
Specify type and amount?
- g. Produce any gaseous emissions? (Sulfur oxides, carbon monoxide, nitrogen oxides, volatile organic compounds, fluorine, chlorine, benzene, vinyl chloride, hydrogen sulfide, other)
Specify type and amount?
- h. Use any gaseous emission control equipment? (Water scrubber, activated carbon bed, dry scrubber, other)
Specify type and amount?
- i. Use any onsite disposal systems? (Solid waste incinerator, liquid waste incinerator, waste fuel recovery burner, gaseous flare, other)
Specify type and amount?
- j. Involve the removal of asbestos containing material?
Specify type and amount?
- k. Involve sand blasting or media blasting of any structure or vessel?
Specify type and amount?
- l. Does the facility include a basement? (radon survey)
- m. Contain any Laboratory type fume hoods?
- n. Involve any spray paint booths?

3. WATER (Does the activity:)

- a. Use existing sanitary sewage treatment?
Specify type and amount?

- b. Require new sewage treatment processes? (Biological (examples: septic tank, package plant), chemical/physical (examples: precipitation, filtration, ion exchange, activate carbon), other)

Specify type and amount?

- c. Require water for process operation other than for drinking water and/or sanitation?

Specify type and amount?

- d. Use non-contact or contact cooling water?

Specify type and amount?

- e. Require additional withdrawal of surface or ground water? Will withdrawal wells, borings, bedrock probes, etc. be conducted that penetrate the bedrock structure during planning, construction or operation of the facility?

Specify type and amount?

- f. Discharge process waste water? (sources other than non-contact cooling water or sanitary sewage)

Specify type and amount?

- g. Use water transportation?

Specify type and amount?

- h. Involve steam cleaning or water blasting of any structure or vessel?

Specify type and amount?

- i. Will process area storm water runoff be controlled by diversion, storage, and controlled release or other method?

Specify type and amount?

- j. Require a location adjacent or near a stormwater drainage ditch?

4. LAND/WETLANDS

- a. Will any land area proposed for use require clearing, site grading, excavation, dredging, filling, and/or construction of docks, piers, or dolphins?

- b. Is the proposed land use consistent with MSFC's Master Plan?

- c. Will any part of the facilities and/or support be located in or adjacent to flood plains, wetlands, or waterbeds? (Consult Environmental Resources Document)

5. RADIOACTIVE MATERIALS AND NON IONIZING RADIATION

- a. Will the operational activities use or introduce any new sources of ionizing or non ionizing radiation? (Uses for ionizing radiation are for analysis, calibration and nondestructive testing (radon, radio nuclides), non ionizing sources such as microwave radiation)

Specify type and amount?

6. NOISE AND VIBRATION

- a. Will the proposed action or existing activity create noise and/or vibration? (engine testing, test article testing, etc.)

Specify type, amount, and decibel level?

7. TRANSPORTATION AND UTILITY CORRIDORS (will the proposed action require:)

- a. New roads and/or utility service lines?

Specify type and amount?

- b. Any extensions and/or modifications to MSFC's existing utility systems?

c. Any modifications to stormwater drainage ditches?

8. SOLID AND HAZARDOUS WASTE (will proposed action or does the activity:)

a. Use or store chemicals at the facility?

Specify type, amount and controls?

b. Generate any solid or liquid wastes?

If yes, any know hazardous waste? (spent solvents, reaction products, unused or expired reagents, acids, bases, test sample wastes, equipment cleaning wastes, spent blast material (paints), rinse water and containers from herbicide/pesticide use, paint wastes, ignitable wastes, vehicle maintenance wastes, photographic wastes, other)

Specify type and amount?

nonhazardous waste? (metals, glass, wood, paper, plastic, waste (used) oil, other)

Specify type and amount?

Any unusual amount of nonhazardous waste or used oil?

c. Involve treatment, storage, and/or disposal operations? (treatment of a hazardous waste means any process designed to change the physical, chemical, or biological character or composition of a hazardous waste to neutralize it, recover energy or material resources from it, render it less hazardous or non hazardous, safer to handle, or amenable to recovery, storage, or reduction in volume)

Specify type and amount?

d. Use any chemical recycling equipment?

Specify type and amount?

e. Have maintenance area at the location?

Specify type and amount?

f. Will any potentially lead containing surfaces be disturbed? (solder pipes, paint)

Specify type and amount?

g. Will diking or other containment structure be required?

Specify type and amount?

9. TOXIC SUBSTANCES

a. Will the proposed action involve the use of PCB-containing equipment, asbestos containing material or will existing asbestos containing materials be disturbed?

Specify type and amount?

b. Will the subsoil and surrounding grounds receive termite treatment?

Specify type and amount?

c. Use hexavalent chromium chemicals in comfort cooling towers?

d. Use halogenated dibenzodioxins/dibenzofurans as contaminants in certain specified manufactured and processed chemical substances.

10. PROPELLANTS AND EXPLOSIVES (will proposed activity or existing activity:)

a. Use any propellants or explosives?

Specify type and amount?

- b. Generate waste propellant or waste explosives?

Specify type and amount?

- c. Use any solid fuel grains? (hybrid motors)

Specify type and amount?

11. HISTORICAL AND CULTURAL FACTORS

- a. Will a historical site be affected by construction of the facility or modification to an existing facility? (Building 4665/Redstone Historic Test Site, Building 4705/Shop and Neutral Buoyancy Simulator, Building 4550/Structural Test Facility (Dynamic), Building 4572/Propulsion and Structural Test Facility (S4B))
- b. Will any other potential historical site be affected? (cemeteries, bunkers)
- c. Will any cultural area be affected? (parks, physical fitness center, day care center)

12. REMARKS/ADDITIONAL INFORMATION

NAME OF PERSON COMPLETING THIS FORM:

TELEPHONE NUMBER: OFFICE:

ENVIRONMENTAL ANALYSIS CHECKLIST (EVAL CHECKLIST)

PURPOSE

TO PROVIDE A DECISIONMAKING TOOL FOR MANAGERS INITIATING A PROJECT.

APPLICABILITY

- ALL PROPOSED PROJECTS AND PROGRAMS WITH THE POTENTIAL TO SIGNIFICANTLY IMPACT THE ENVIRONMENT.
- ALL ACTIVITIES INCLUDING CONSTRUCTION, REPAIR, REHABILITATION, MODIFICATION, ACQUISITION OF EQUIPMENT, DESIGN AND PLANNING RELATED TO FUTURE FACILITIES NEEDS.

TIMING

TO BE CARRIED OUT FROM THE EARLIEST OF PLANNING STUDIES FOR THE ACTION IN QUESTION.

REVIEW

THIS CHECKLIST AND SUPPORTING DOCUMENTS WILL UNDERGO REVIEW BY THE FACILITIES PRESERVATION OFFICER, THEN THE ENVIRONMENTAL COMPLIANCE OFFICE.

PROJECT NAME: _____

TECHNICAL PROJECT ENGINEER _____ DATE _____

PART A

A "YES" ANSWER TO ANY OF THE FOLLOWING INDICATES THAT AN ENVIRONMENTAL ASSESSMENT WILL NORMALLY BE PREPARED. IF THE ANSWER IS UNCERTAIN, PLEASE ATTACH AN EXPLANATION.

YES NO UNCERTAIN

_____ ANY ACTION AFFECTING AREAS OF HISTORICAL OR CULTURAL

CONCURRENCE OF FACILITY PRESERVATION OFFICER:

SIGNATURE _____ DATE _____

_____ ANY CONSTRUCTION OR OTHER ACTIVITY IN A FLOODPLAIN OR WETLAND.

_____ ANY ACTION WHICH COULD OR WILL AFFECT ANY THREATENED OR ENDANGERED SPECIES.

_____ ANY ENVIRONMENTAL EFFECTS ON MINORITY COMMUNITIES AND LOW
INCOME COMMUNITIES, INCLUDING HUMAN HEALTH, SOCIAL, AND
ECONOMIC EFFECTS

PART B

A "YES" ANSWER TO ANY ONE OF THE FOLLOWING ITEMS INDICATES THE NEED TO PREPARE SUPPORTING DOCUMENTATION. IF AN ANSWER IS UNCERTAIN, PLEASE ATTACH AN EXPLANATION.

THIS DOCUMENTATION SHOULD BE A BRIEF DESCRIPTION OF THE PROPOSED SPECIFIC ACTION. IT SHOULD BE SUBMITTED WITH THIS CHECKLIST. ANY PLANNED MEASURES TO PREVENT POLLUTION SHOULD BE DOCUMENTED AND SUBMITTED WITH THIS FORM.

DO THE PROPOSED ACTIONS, CONSTRUCTION, OR FACILITY OPERATION INCLUDE OR INVOLVE:

YES NO UNCERTAIN

_____ DISCHARGE OF ANY SUBSTANCES INTO THE AIR, SURFACE OR
GROUNDWATER, SANITARY SEWER, OR SOILS.

_____ REMOVAL OF VEGETATION OR DESTRUCTION OF WILDLIFE HABITAT OR
GRADING ACTIVITIES.

____ ACQUISITION, USE, GENERATION, STORAGE, OR DISPOSAL OF ANY TOXIC
____ OR HAZARDOUS SUBSTANCES.

____ GENERATION OF HAZARDOUS, TOXIC, OR RADIOLOGICAL WASTES.

____ GENERATION OF DEMOLITION DEBRIS OR EXCAVATED SOIL.

____ GENERATION OF IONIZING OR NONIONIZING RADIATION.

____ GENERATION OF HIGH NOISE LEVELS (ABOVE 80dBA).

____ USE OF PESTICIDES, INCLUDING INSECTICIDES, HERBICIDES, FUNGICIDES,
____ AND RODENTICIDES.

____ CONSTRUCTION OR MODIFICATION OF A SEWAGE COLLECTION,
____ TRANSMISSION SYSTEM, OR TREATMENT PLANT.

____ DISTURBANCE OF ASBESTOS CONTAINING MATERIALS OR FACILITIES.

____ DISTURBANCE OF PCB CONTAMINATED MATERIALS OR EQUIPMENT.

____ INSTALLATION OR REACTIVATION OF ABOVEGROUND OR UNDERGROUND
____ STORAGE TANKS.

____ A SIGNIFICANT IMPACT ON LOCAL SOCIAL OR ECONOMIC CONDITIONS.

____ A SIGNIFICANT IMPACT ON LOCAL UTILITIES OR TRANSPORTATION

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